What is claimed is;

1. An outer rotor type brushless motor comprising an outer rotor having permanent magnets fixed onto an inner periphery of a cup-like rotor yoke, a stator including a stator core having a plural of magnetic pole portions protruded on an outer periphery of an annular portion of said stator core and faced to said permanent magnets and coils wound on said magnetic pole portions, respectively, a cylindrical boss disposed on an inner periphery of said annular portion of said stator core, a rotational shaft extending along an axis of said boss and rotationally supported on said boss by a bearing with a leading end of said shaft having a center portion of said rotor yoke fixed thereto and a mounting plate fixed onto an outer periphery of said boss, said boss being formed of resin mold and extending through a hole in said mounting plate and fixed thereto and said annular portion of said stator core being fixed to a rising portion of the inner periphery of said mounting plate.

2. An outer rotor type brushless motor comprising an outer rotor having permanent magnets fixed onto an inner periphery of a cup-like rotor yoke, a stator including a stator core having a plural of magnetic pole portions protruded on an outer periphery of an annular portion of said stator core and faced to said permanent magnets and coils wound on said magnetic pole portions, respectively, a cylindrical boss disposed on an inner periphery of said annular portion of said stator core, a rotational shaft extending along an axis of said boss and rotationally supported on said boss by a bearing with a leading end of said shaft having a center portion of said rotor yoke fixed thereto and a mounting plate fixed onto an outer periphery of said boss, said boss being formed of resin mold, an annular rising portion being formed on the side of the inner periphery of said mounting plate, an inner peripheral portion provided at the top of said rising portion in parallel to said mounting plate being integrally inserted into said boss so as to be fixed thereto when said boss

is molded and said annular portion of said stator core being mounted on and fixed to said inner peripheral portion at the top of said rising portion.

3. An outer rotor type brushless motor comprising an outer rotor having permanent magnets fixed onto an inner periphery of a cup-like rotor yoke, a stator including a stator core having a plural of magnetic pole portions protruded on an outer periphery of an annular portion of said stator core and faced to said permanent magnets and coils wound on said magnetic pole portions, respectively, a cylindrical boss disposed on an inner periphery of said annular portion of said stator core, a rotational shaft extending along an axis of said boss and rotationally supported on said boss by a bearing with a leading end of said shaft having a center portion of said rotor yoke fixed thereto and a mounting plate fixed onto an outer periphery of said boss, said boss being formed of resin mold, a hole being provided in said mounting plate at its center, a plural of rising portions being intermittently provided on said inner peripheral portion around said hole so as to form at the tops of said rising portions core supports having a face parallel to said inner peripheral portion, at least one of said inner peripheral portion and said core supports being integrally inserted into said boss so as to be fixed thereto when said boss is molded and said annular portion of said stator core being mounted on and fixed to said core supports.

4. An outer rotor type brushless motor comprising an outer rotor having permanent magnets fixed onto an inner periphery of a cup-like rotor yoke, a stator including a stator core having a plural of magnetic pole portions protruded on an outer periphery of an annular portion of said stator core and faced to said permanent magnets and coils wound on said magnetic pole portions, respectively, a cylindrical boss disposed on an inner periphery of said annular portion of said stator core, a rotational shaft extending along an axis of said boss and rotationally supported on said boss by a bearing with a

leading end of said shaft having a center portion of said rotor yoke fixed thereto and a mounting plate fixed onto an outer periphery of said boss, said boss being formed of resin mold, a flange being protruded on the outer periphery of said boss, an annular rising portion being provided on the side of an inner periphery of said mounting plate, an annular peripheral portion provided at the top of said rising portion and having a face parallel to said mounting plate being mounted on said flange of said boss, said annular portion of said stator core being mounted on said inner peripheral portion at the top of said rising portion and said annular portion of said stator core, said inner peripheral portion of said mounting plate and said flange of said boss being tightened by screws extending through them.

5. An outer rotor type brushless motor comprising an outer rotor having permanent magnets fixed onto an inner periphery of a cup-like rotor yoke, a stator including a stator core having a plural of magnetic pole portions protruded on an outer periphery of an annular portion of said stator core and faced to said permanent magnets and coils wound on said magnetic pole portions, respectively, a cylindrical boss disposed on an inner periphery of said annular portion of said stator core, a rotational shaft extending along an axis of said boss and rotationally supported on said boss by a bearing with a leading end of said shaft having a center portion of said rotor yoke fixed thereto and a mounting plate fixed onto an outer periphery of said boss, said boss being formed of resin mold, a hole being provided in said mounting plate at its center, a plural of rising portions being intermittently provided on an inner peripheral portion of said mounting plate around said hole so as to form at the tops of said rising portions core supports having a face parallel to said inner peripheral portion, said core supports being inserted into said boss so as to be fixed thereto when said boss is molded, said inner peripheral portion being supported on the outer periphery of said boss, said annular portion of

said stator core being mounted on said core supports and said annular portion of said stator core, said core supports of said mounting plate and said flange of said boss being tightened by screws extending through them.

6. An outer rotor type brushless motor comprising an outer rotor having permanent magnets fixed onto an inner periphery of a cup-like rotor yoke, a stator including a stator core having a plural of magnetic pole portions protruded on an outer periphery of an annular portion of said stator core and faced to said permanent magnets and coils wound on said magnetic pole portions, respectively, a cylindrical boss disposed on an inner periphery of said annular portion of said stator core, a rotational shaft extending along an axis of said boss and rotationally supported on said boss by a bearing with a leading end of said shaft having a center portion of said rotor yoke fixed thereto and a mounting plate fixed onto an outer periphery of said boss, said boss being formed of resin mold, said annular portion of said stator core being inserted into an outer periphery of said boss so as to be fixed thereto when said boss is molded and said annular portion of said stator core being fixed to a rising portion provided on the inner periphery of said mounting plate.

7. An outer rotor type brushless motor comprising an outer rotor having permanent magnets fixed onto an inner periphery of a cup-like rotor yoke, a stator including a stator core having a plural of magnetic pole portions protruded on an outer periphery of an annular portion of said stator core and faced to said permanent magnets and coils wound on said magnetic pole portions, respectively, a cylindrical boss disposed on an inner periphery of said annular portion of said stator core, a rotational shaft extending along an axis of said boss and rotationally supported on said boss by a bearing with a leading end of said shaft having a center portion of said rotor yoke fixed thereto and a mounting plate fixed onto an outer periphery of said boss, said boss being formed of resin mold, said annular portion of said stator core being

inserted into an outer periphery of said boss so as to be fixed thereto, said coil insulation layers of said stator core being formed of resin mold and said annular portion of said stator core being fixed to a rising portion provided on the inner periphery of said mounting plate.

8. An outer rotor type brushless motor as set forth in claim 7 and wherein said boss and said coil insulation layers are integrally formed.

9. An outer rotor type brushless motor as set forth in claim 6, 7 or 8 and wherein an annular rising portion is provided on said mounting plate, a hole is provided in said rising portion forming an inner peripheral portion at the top of said rising portion, a plural of radial slots are provided in said inner peripheral portion around said hole, said annular portion of said stator core is integrally inserted into said boss at ribs so as to be supported by said ribs of said boss at said slots of said mounting plate and said annular portion of said stator core is fixed to said inner peripheral portion of said mounting plate.

10. An outer rotor type brushless motor as set forth in claim 6, 7 or 8 and wherein a hole is provided in said mounting plate, a plural of rising portions are intermittently provided on an inner peripheral portion around said hole in a circumferential direction, core supports is provided at the tops of said rising portions in parallel to said inner peripheral portion, said annular portion of said stator core is mounted on said core supports and said annular portion of said stator core is inserted into on an outer periphery of said boss when said boss is molded so as to be supported by said ribs above said inner peripheral portion between adjacent rising portions.